

XP 002043475

1/1 - (C) WPI / DERWENT
AN - 89-261741 ç251
AP - SU85 957866 851001
PR - SU85 957866 851001
TI - Railway wheel rolling mill - applies pressure to inside surface of rim with main rolls in proportion to elastic limit
IW - RAILWAY WHEEL ROLL MILL APPLY PRESSURE SURFACE RIM MAIN ROLL PROPORTION ELASTIC LIMIT
IN - IOFFE A M; LISTOPADOV I B; SKOROKHOD A G
PA - (CHRN) FERROUS METALLURGY INST
PN - SU1442310 A 881207 DW8936 004pp
ORD - 1988-12-07
IC - B21H1/04
FS - CPI;GMPI
DC - M21 P52
AB - SU1442310 Enhanced efficiency of railway wheels rolling unit ensuring improved product quality is achieved by applying the specific deformation pressure equal to 0.9-0.2 of the elastic limit of the rolled material at the temperature of rolling. The pressure is directed to the inside surfaces of the rim towards the main rolls. The preformed blank is heated for pressing its side and inside surfaces in stationary inclined and driven rolls, as well as to the rolling surface to form the flange.
- The blank is formed in 2.5-3 turns with the rim rolling surface forming combined with rolling the flange and side surfaces (2,3). The hydraulic cylinders (4) move the carriage (5) while cylinders (6) control the rolls (7) using a pressure of 5.5-6.0 MPa. The pressure of cylinders (6) is subsequently raised to 12-14 MPa to roll the rim and the disc of the wheel in the course of 5-6 turns, and at the same time reducing the pressure of the main rolls (8) to 2.5-3.0 MPa. This allows rolling of the cone with rolls (9,10), while the press control is carried out with the valves (13,14).
- USE/ADVANTAGE - In rolling of railway wheels. The control of wheel rolling reduces the radial offset of the hub with respect to the wheel rim. Bul.45/7.12.88